CLAIMS

What is claimed is:

1.   A method of initiating a search, said method to
execute in a handheld device incorporating the functions
of a mobile digital telephone, a screen, an input device,
a speaker, a processor and memory capability, said method
comprising:

    offering an initial suggested topic selection and an
arbitrary entry window on the screen;

    receiving a selection entered via the input device;

    presenting a predetermined list of narrower follow-
on topic selections, said predetermined list dependent on
said selection;

    repeating said receiving and presenting steps until
a narrowest topic selection is received; and

    forwarding said narrowest topic selection to a
server over a wireless link as the basis of a search.

2.   The method of claim 1 further comprising:

    after the receiving step, offering a verbal
suggestion based on a plurality of prior selection
sequences.

3.   The method of claim 1 wherein said wireless link
utilizes a communications protocol selected from GPS,
GPRS, 3G and Bluetooth.

4.   An apparatus to act as server for a plurality of
local handheld devices, said local handheld devices
incorporating the functions of a Bluetooth mobile digital
telephone, a screen, an input device, a speaker, a

processor   and   memory   capability,   said   apparatus
comprising:

    a handheld device incorporating the functions of a
mobile digital telephone, a screen, an input device, a

5   speaker, a processor and memory capability,

    a Bluetooth communications facility;

    an application to receive communications, including
requests, from said plurality of local handheld devices,
satisfy a number of requests locally, reformat the

10   remainder of said requests into a request for a server,
transmit said request for a server to a server, receive
the results of said request for a server from said
receiver and transmitting said results to said plurality
of local handheld devices.

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5.   The apparatus of claim 4 wherein said mobile
digital phone of said handheld device utilizes a
communications protocol selected from GPS, GPRS and 3G
communications.

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6. A method for displaying streaming video adapted to
run on a handheld device incorporating the functions of a
mobile digital telephone, a screen, an input device, a
speaker, a processor and memory capability, said method

25   comprising:

    receiving a message containing a datastream through
said mobile digital telephone;

    recognizing a streaming video sequence in said
datastream;

30   decoding said datastream into video and audio
components;

displaying said streaming video component on said screen; and

playing said audio component through said speaker.

5 7. The method of claim 6 further comprising:

receiving a message containing streaming video via a plurality of GPRS packets through said mobile digital telephone; and

reassembling said packetized streaming video into a
10 correctly ordered datastream.

8. A method for reading Email adapted to run on a handheld device incorporating the functions of a mobile digital telephone, a screen, an input device, a speaker,
15 a processor and memory capability, said method comprising:

conducting an initial Email dialog with the user;

initiating an Email session with a server;

presenting a page of an Email menu and receiving a
20 selection from said user;

displaying a first screen of said selected message, said message composed of information selected from graphical information, video information, text information and audio information;
25 accessing a follow-on screen of said message while said first screen is being displayed;

accepting user input;

displaying said follow-on screen of said message in response to said user input;
30 repeating said accessing, accepting and displaying steps until said message is completely delivered; and

returning to said presenting step.

9.   The method of claim 8 further comprising displaying said follow-on screen dependent on the contents of the prior screen of said message without user input.

10.   The method of claim 8 further comprising accessing attachments to said message in response to a user input.

11.   The method of claim 8 wherein said attachments are chosen from spreadsheets, documents, pictures, video and audio.

12.   The method of claim 8 wherein said Email session is conducted over a communications protocol selected from GSM, GPRS, 3G and Bluetooth.

13.   A method for utilizing wireless links to determine the location of a handheld device incorporating the functions of a mobile digital telephone, a screen, an input device, a speaker, a processor and memory capability, said method comprising:
        receiving a digital map of the area over said wireless links;
        determining the location of substations relative to said digital map;
        identifying a local area map portion from said digital map of the area using information about a substation transmitting to said handheld unit; and
        presenting the local area map portion when a map function is invoked.

14.   The method of claim 13 wherein said digital map is sourced by a Geographical Information System.

15.   The method of claim 13 further comprising:
    determining a location of said handheld unit and
    presenting a route to a destination from said location on said local area map portion.

16.   The method of claim 13 further including displaying a plurality of matches to a search request on said local area map portion.

17.   The method of claim 16 further comprising:
    selecting one of the plurality of matches to a search request and
    displaying an advertisement associated with said selected match.

18.   A method of connecting an extended wireless handheld unit to a server comprising:
    said handheld unit initiating a call to said server;
    said handheld unit providing sender provided identification and security information to said server;
    said server combining said handheld unit identification and said sender provided information to authenticate said sender;
    if the connection is new, using the sender's security information to enable access to enrolled databases and services;
    welcoming the user;

if the connection is a continuation of a previous connection that terminated abnormally, checking whether a complete screen had been sent;

resending the previous screen when a complete screen had not been sent;

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sending the next screen of a sequence of screens when further screens remain to be sent; and

waiting for sender input.

10   19. The method of claim 18 wherein a call is initiated by the server.

20. The method of claim 18 further comprising:

said server determining a location of said handheld

15   unit and

modifying a response to a user request by said location information unless a specific location is incorporated in said request.

20   21. A method of providing customized information to a user connected to a first server by a wireless extended handheld unit comprising providing a personal database area on said first server, said personal database area filled by said user.

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22. The method of claim 21 wherein said personal database area is provided by a second server within a region, said first and second servers are interconnected by high speed interconnects and a response-time from said

30   personal database does not substantially vary depending on the location of said personal database.

23. The method of claim 22 wherein said personal database area is provided by a second server within a territory comprising a plurality of regions, said first and second servers are interconnected by high speed
5   interconnects and a response-time from said personal database does not substantially vary depending on the location of said personal database.

24. The method of claim 21 further comprising:
10   building a database of preselected data likely to be of interest to users of extended handheld devices;
           adding to said database data in categories of information requested by said user;
           updating a predetermined portion of said database
15   from master sources at periodic intervals;
           monitoring said user's utilization of data in said database; and
           updating the data not in said predetermined portion but accessed with greater than a predetermined frequency
20   from said master source at periodic intervals.

25. The method of claim 24 further comprising:
           analyzing the results of said monitoring said user's utilization of data to determine a time relationship with
25   said access; and
           updating data with said utilization time relationship a predetermined time before the expected utilization time.

30 26. The method of claim 24 wherein said database is provided by a second server within a region, said first and second servers are interconnected by high speed

interconnects and a response-time from said database does not substantially vary depending on the location of said database.

5   27.   The method of claim 26 wherein said database area is provided by a second server within a territory comprising a plurality of regions, said first and second servers are interconnected by high speed interconnects and a response-time from said database does not substantially
10 vary depending on the location of said database.

28.   A method of converting a web page designed for a computer screen to at least one web screen adapted for a screen on an extended handheld device, said method
15 comprising:

    selecting a screen template from a set of conversion templates, wherein said screen template has a page viewing area and a screen viewing area;

    displaying said web page in said page viewing area;
20   associating a one of a plurality of tags with each of a plurality of partitions of said web page;

    formatting a screen by partitioning said screen viewing area and associating one of said plurality of tags with each said page partition; and
25   saving a formatted screen in an information content database.

29.   The method of claim 28 further comprising:

    saving a process of transforming said web page
30 utilizing said plurality of tags and with said respective page and screen partitions.

30. The method of claim 28 further comprising:

chaining a plurality of screens to said screen, wherein said plurality of screens incorporate a plurality of partitions, each partition associated with one of said
5   plurality of tags.

31. The method of claim 29 further comprising:

before selecting a template, determining whether said web page has said process saved for it and if so,
10   applying said process to said web page; and

saving the result in said information content database.